IN THE CLAIMS:

Please amend claims 1-27 as follows.

1. (Currently Amended) A method for blindly extracting a broadband signal from a narrowband signal in time domain, the method comprising

receiving [[(100)]] a signal in a mobile system receiver,

performing [[(102)]] an analogue-to-digital conversion on the received signal so as to provide signal samples,

[[c h a r a c t e r i z e d by]] the method <u>further</u> comprising

selecting [[(104)]] a set of signal samples,

modifying the selected signal sample set so as to provide a set in accordance with the distribution,

forming [[(106)]] a statistical function value on the basis of the signal sample values of the set in accordance with the distribution,

forming [[(108)]] a threshold value on the basis of the statistical function value and a preset threshold parameter,

dividing [[(110)]] the samples of the set in accordance with the distribution between the set in accordance with the distribution and a set outside the distribution by using the threshold value as a limit,

repeating [[(118)]] said statistical function value formation by using the sample set in accordance with the distribution, said threshold value formation and said division of the samples into said sets, if a termination condition for the repetition is not fulfilled, and

after fulfilment of the termination condition, setting [[(116)]] to a set value the samples from the selected signal sample set which belong to the set in accordance with the distribution or to the set outside the distribution.

2. (Currently Amended) A method for blindly extracting a broadband signal from a narrowband signal in frequency domain, the method comprising

receiving [[(100)]] a signal in a mobile system receiver,

performing [[(102)]] an analogue-to-digital conversion on the received signal so as to provide signal samples,

[[c h a r a c t e r i z e d by]] the method further comprising

selecting [[(104)]] a set of signal samples,

converting the selected signal sample set to frequency domain,

modifying the selected signal sample set so as to provide a set in accordance with the distribution,

forming [[(106)]] a statistical function value on the basis of the signal sample values of the set in accordance with the distribution,

forming [[(108)]] a threshold value on the basis of the statistical function value and a preset threshold parameter,

dividing [[(110)]] the samples of the set in accordance with the distribution between the set in accordance with the distribution and a set outside the distribution by using the threshold value as a limit,

repeating [[(118)]] said statistical function value formation by using the sample set in accordance with the distribution, said threshold value formation and said division of the samples into said sets, if a termination condition for the repetition is not fulfilled,

after fulfilment of the termination condition, setting [[(116)]] to set value such samples from the selected signal sample set that belong to one of the following sets: the set in accordance with the distribution, the set outside the distribution, and

transforming the set comprising the selected signal samples by means of an inverse transformation of the transformation method employed back to the time domain.

3.   (Currently Amended)   A method as claimed in claim 1 or 2, ~~characterized in that~~ <u>wherein</u> the blind extraction refers to interference suppression, in which the interference is removed from the received signal without knowledge of the interfering signal.

4.   (Currently Amended)   A method as claimed in claim 1 or 2, ~~characterized in that~~ <u>wherein</u> the preset threshold parameter is determined by means of an excised portion of the Rayleigh distribution and the mean of the distribution of the noise-free signal.

5.   (Currently Amended)   A method as claimed in claim 1 or 2, ~~characterized in that~~ <u>wherein</u> the signal sample set is selected such that it covers a symbol length in the transmitted signal.

6.   (Currently Amended) A method as claimed in claim 1 or 2, ~~characterized in that~~ <u>wherein</u> in forming the value of a statistical function, the average of magnitude or a magnitude spectrum is formed.

7.   (Currently Amended) A method as claimed in claim 1 or 2, ~~characterized in that~~ <u>wherein</u> the termination condition is induced from the signal within distribution being Gaussian-distributed on reception.

8.   (Currently Amended) A method as claimed in claim 1 or 2, ~~characterized in that~~ <u>wherein</u> the termination condition used is that a given number of iteration rounds is fulfilled, each round comprising the formation of a statistical function value, the formation of a threshold value and the division of samples into the sample sets.

9.   (Currently Amended) A method as claimed in claim 1 or 2, ~~characterized in that~~ <u>wherein</u> the termination condition used is that in the division of the samples into sample sets, all samples remain in their sample sets.

10.   (Currently Amended) A method as claimed in claim 1 or 2, ~~characterized in that~~ <u>wherein</u> in the method narrowband interference is removed from a broadband signal.

11.   (Currently Amended) A method as claimed in claim 1 or 2, ~~characterized in that~~ <u>wherein</u> in the method broadband interference is extracted from a narrowband signal.

12.   (Currently Amended) A method as claimed in claim 1 or 2, ~~characterized in that~~ <u>wherein</u> when samples of the selected signal sample set are set to the set value, the samples are set to the threshold value.

13.   (Currently Amended) A method as claimed in claim 1 or 2, ~~characterized in that~~ <u>wherein</u> when samples of the selected signal sample set are set to the set value, the samples are set to zero.

14.   (Currently Amended) A method as claimed in claim 1 or 2, ~~characterized in that~~ <u>wherein</u> absolute values of the signal sample values are calculated for the selected set of signal samples.

15.   (Currently Amended) A method as claimed in claim 1 or 2, ~~characterized in that~~ <u>wherein</u> squares of the absolute values of the signal sample values are calculated for the selected set of signal samples.

16.   (Currently Amended) A receiver in a radio system, the receiver comprising

means [[(500)]] for receiving a signal,

an analogue-to-digital converter [[(504)]] for providing signal samples from the received signal,

~~characterized in that~~ <u>wherein</u> the receiver comprises

means for selecting a set of signal samples,

means for modifying [[(508)]] the selected signal sample set so as to form a set in accordance with the distribution,

means [[(508)]] for forming a statistical function value on the basis of the signal sample values of the set in accordance with the distribution,

means [[(508)]] for forming a threshold value on the basis of the statistical function value and a preset threshold parameter,

means [[(508)]] for dividing the samples between the set in accordance with the distribution and a set outside distribution by using the threshold value as a limit,

means [[(508)]] for repeating said statistical function value formation by using the sample set in accordance with the distribution, said threshold value formation and said division of the samples into said sets if a termination condition for the repetition is not fulfilled, and

means, after fulfilment of the termination condition, for setting [[(508)]] to a set value such samples from the selected signal sample set that belong to one of the following sets: the set in accordance with the distribution and the set outside distribution.

17. (Currently Amended) A receiver in a radio system, the receiver comprising

means for receiving [[(500)]] a signal,

an analogue-to-digital converter [[(504)]] for providing signal samples from the received signal,

~~characterized in that~~ <u>wherein</u> the receiver comprises

means for selecting a set of signal samples,

means for converting [[(512)]] the selected signal sample set to the frequency domain,

means for modifying [[(508)]] the selected signal sample set so as to form a set in accordance with the distribution,

means for forming [[(508)]] a statistical function value on the basis of the selected signal samples,

means for forming [[(508)]] a statistical function value on the basis of the signal sample values of the set in accordance with the distribution,

means for forming [[(508)]] a threshold value on the basis of the statistical function value and a preset threshold parameter,

means for dividing [[(508)]] the samples of the set in accordance with the distribution between the set in accordance with the distribution and a set outside distribution by using the threshold value as a limit,

means for checking the termination condition,

means for repeating [[(508)]] said statistical function value formation by using the sample set in accordance with the distribution, said threshold value formation and said division of the samples into said sets if a termination condition for the repetition is not fulfilled, and

means, after fulfilment of the termination condition, for setting [[(508)]] to a set value such samples from the selected signal sample set that belong to one of the following sets: the set in accordance with the distribution and the set outside distribution, and

means for converting [[(514)]] the set comprising the selected signal samples by an inverse transformation of the transformation method employed back to the time domain.

18.   (Currently Amended)   A receiver as claimed in claim 16 or 17, ~~characterized in that~~ <u>wherein</u> the preset threshold parameter has been determined

by means of an excised portion of the Rayleigh distribution and the average of the distribution of the noise-free signal.

19. (Currently Amended) A receiver as claimed in claim 16 or 17, ~~characterized in that~~ <u>wherein</u> the means for selecting a set of signal samples are arranged to select the sample set such that it covers a symbol length in the transmitted signal.

20. (Currently Amended) A receiver as claimed in claim 16 or 17, ~~characterized in that~~ <u>wherein</u> the means for forming the threshold value are arranged to form the average of magnitude or magnitude spectrum as the statistical function value.

21. (Currently Amended) A receiver as claimed in claim 16 or 17, ~~characterized in that~~ <u>wherein</u> the means for repeating are arranged to use as the termination condition the fact that the signal within distribution is Gaussian-distributed on reception.

22. (Currently Amended) A receiver as claimed in claim 16 or 17, ~~characterized in that~~ <u>wherein</u> the means for repeating are arranged to use as the termination condition the fact that a given number of iteration rounds is fulfilled, each round comprising the formation of a statistical function value, the formation of a threshold value and the division of samples into the sample sets.

23. (Currently Amended) A receiver as claimed in claim 16 or 17, ~~characterized in that~~ <u>wherein</u> the means for repeating are arranged to use as the

termination condition the fact that in the sample division into the sample sets, all the samples remain in their sample sets.

24. (Currently Amended) A receiver as claimed in claim 16 or 17, ~~characterized by~~ being ~~arranged~~ <u>configured</u> to remove narrowband interference from a broadband signal.

25. (Currently Amended) A receiver as claimed in claim 16 or 17, ~~characterized by~~ being ~~arranged~~ <u>configured</u> to remove broadband interference from a narrowband signal.

26. (Currently Amended) A receiver as claimed in claim 16 or 17, ~~characterized in that~~ <u>wherein</u> the means for setting to the set value comprised by the receiver are arranged to set the samples of the selected signal sample set to the threshold value.

27. (Currently Amended) A receiver as claimed in claim 16 or 17, ~~characterized in that~~ <u>wherein</u> the means for setting to the set value comprised by the receiver are arranged to set the samples of the selected signal sample set to zero.